## Message

From: Schulman, Michael [Schulman.Michael@epa.gov]

**Sent**: 12/6/2021 9:19:13 PM

To: Poalinelli, Edwin [POALINELLI.EDWIN@EPA.GOV]
Subject: TRW Environmental Indicator 2021 change

## Old emails below

From: Schulman, Michael

Sent: Thursday, June 10, 2021 5:35 PM

**To:** Poalinelli, Edwin <POALINELLI.EDWIN@EPA.GOV> **Subject:** RE: Health concern for work in TRW superfund

And, I think your CDO is tomorrow, not to add more to your plate, but it's be good to have the TRW (and AMD) Els in SEMS updated so the website updates.

Step/Questions	Response
Step 1. Is there sufficient known and reliable information to make an evaluation on human exposure at this site?	Yas 🕶
Step 2. Have all long-term human exposure-related cleanup goals been met for the entire site?	S ¥
Step 3. Are there complete human exposure pathways between contaminated ground water, soil, surface water, sediment, or air media and human receptors such that exposures can be reasonably expected under current conditions?	(%c <b>Y</b> )
Step 4. Are the actual or reasonably expected human exposures associated with the complete pathways identified in Step 3 within acceptable limits under current conditions?	
Step 5. Is the site Construction Complete, is the remedy operating as intended, and are engineering and institutional controls (if required), in place and effective?	Yes V
Step 6. Are there continuing exposures at the site? Answer "Yes" only if EPA (or a state or PRP) has exhausted all response actions and legal authorities to prevent unacceptable human exposures, yet exposures continue due to a refusal by the property owner(s) to participate in the remedy (e.g. refusal to accept a municipal water supply hookup) AND the region wishes to exercise its discretion to classify the site as Human Exposure Under Control, consistent with the requirement laid out in the Superfund Environmental indicaors Guidence (OSWER 9285.02, Manch 2008, Pages 4-10 and 4-11).	[‰ ¥]

The TRW Microwave Site (CAD009159088) is under one single 1991 ROD as part of the Triple Site (CAN000900265) which includes the Offsite Operable Unit (CAN000900265) the AMD 901/902 Site (CAD048634059), and the non-NPL Philips Site (formerly Signetics Site; CAD009159088). The Triple Site was transferred from the State of California to EPA in August 2014, subsequent to which EPA ordered the Responsible Parties to conduct vapor intrusion (VI) evaluation at buildings overlying the TCE groundwater plume to determine if the VI pathway was complete and if a remedy is required. The TRW Microwave on-property evaluation showed no evidence of unacceptable VI (see below). For the Triple Site Offsite Operable Unit, which is downgradient of the TRW Microwave Site, further outreach and the installation of VI mitigation systems is currently ongoing.

For the TRW Microwave Site, the vapor intrusion risk has been addressed multiple times. In 2013 indoor air sampling was conducted in the then unoccupied 825 Stewart Avenue building. The results indicated that a few volatile organic compounds were present at concentrations greater than the generic health risk screening values at the time for workers. In 2013, the 825 Stewart Ave building was renovated the now current property owner proactively implemented VI mitigation measures:

Step/Questions
Step 1. Is there sufficient known and reliable information to make an evaluation
exposure at this site?

Step 2. Have all long-term human exposure-related cleanup goals been met fo site?

Step 3. Are there complete human exposure pathways between contaminated soil, surface weren, sediment, or air media and human receptors such that expreasonably expected under current conditions?

Step 4. Are the actual or reasonably expected human exposures associated wit pathways identified in Step 3 within acceptable limits under current conditions!

Step 5. Is the site Construction Complete, is the remedy operating as intended engineering and institutional controls (if required), in place and effective?

Step 6. Are there continuing exposures at the site? Answer "Yes" only if EPA (c RRP) has exhausted all response actions and legal authorities to prevent unact exposures, yet exposures continue due to a refusal by the property owner(s) to the remedy (e.g. refusal to accept a municipal vater supply hookup) ANO the to exercise its discretion to classify the site as Human Exposure Under Control, with the requirement laid out in the Superfund Environmental indicaors Guiden 9285.02. March 2008, Pages 4-10 and 4-11).

The AMD 901/902 Site (CAD048634059) is under a single of the Triple Site (CAN000900265) which includes the Offsite (CAN000900265) the TRW Microwave Site (CAD00915908 Philips Site (formerly Signetics Site; CAD009159088).

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At AMD 901/902, Indoor air samples were collected to dir concentrations of COCs inside the storage facility building turned off. Indoor air samples were collected at nine locat the vapor intrusion evaluation indicate that under current indoor air quality is not impacted by concentrations of CO groundwater via the vapor intrusion pathway.

o August/September 2014: A sub-slab vapor collection system was installed underneath the site building to vent vapors to the atmosphere.

o October/November 2014: Contaminated soil from underneath the building in the former TRW Microwave source area was excavated and removed to prevent contaminants in the soil from volatilizing into the building. Additionally, small diameter groundwater wells inside the building were decommissioned and sealed to eliminate a potential vapor intrusion pathway into the building.

o December 2014: To reduce contamination in groundwater and VI potential, emulsified vegetable oil was injected underneath as an ISB remedy.

o April 2015: Openings through pipes, seams, or cracks in the building's concrete sub-slab were sealed to prevent VI. Additionally, the spaces between the walls of the three sections of the buildings were also sealed.

After the protective measures above were implemented, indoor air sampling was conducted in May 2015 with the HVAC system turned. The results were less than EPA commercial screening values, demonstrating the effectiveness of the post-2013 VI mitigate measures.

Due to building renovations after the May 2015 indoor air sampling event, another indoor air sampling event was conducted in Dec 2015 with the HVAC system off, except for one small zone where the HVAC system could not be turned off. The December 2015 results again demonstrated Site COCs were less than EPA screening values for workers.

The remedy in place at the TRW Microwave Site remains protective. EPA will continue to evaluate the protectiveness of the remedy if conditions at the Site change. EPA will also continue to evaluate the protectiveness at the Site during the mandatory Five-Year Review, last completed for the TRW Microwave and the Triple Site in late 2019.

From: Schulman, Michael

Sent: Thursday, June 10, 2021 5:26 PM

**To:** Poalinelli, Edwin < POALINELLI.EDWIN@EPA.GOV > **Subject:** RE: Health concern for work in TRW superfund

Thanks, I'll go ahead and send out as Angie's off now and I like it anyway. As long as it's not dismissive, rude, tone-deaf, etc. she can always follow up if it's important to her.

From: Poalinelli, Edwin < POALINELLI.EDWIN@EPA.GOV>

Sent: Thursday, June 10, 2021 5:24 PM

**To:** Schulman, Michael < Schulman.Michael@epa.gov > **Subject:** RE: Health concern for work in TRW superfund

I looks good to me.

## Edwin "Chip" Poalinelli

Section Manager - California Site Cleanup Section I
Superfund and Emergency Management Division U.S. EPA Region 9
75 Hawthorne Street

San Francisco, CA 94105 415-972-3390 415-301-1573 (cell) poalinelli.edwin@epa.gov

From: Schulman, Michael < Schulman. Michael@epa.gov >

Sent: Thursday, June 10, 2021 5:13 PM

**To:** Poalinelli, Edwin < <a href="mailto:POALINELLI.EDWIN@EPA.GOV">POALINELLI.EDWIN@EPA.GOV</a>; Fuoco, Angie <a href="mailto:Fuoco.Angie@epa.gov">Fuoco.Angie@epa.gov</a>> <a href="mailto:Cc: Ty">Cc: Ty</a>, Fatima <a href="mailto:Ty">Ty</a>-Fatima@epa.gov</a>; PerezSullivan, Margot <a href="mailto:PerezSullivan.Margot@epa.gov">PerezSullivan.Margot@epa.gov</a>>

Subject: RE: Health concern for work in TRW superfund

Hi Chip / Angie,

Do you have any comments on my response below. I have a longer response drafted, but thought I'd go with shorter. If you think more should be written, I'd still want to send below out, but with a note I'd follow up (tomorrow or next week) with more information.

Hi Hongyan,

I apologize, the TRW Microwave website is outdated and the information that human exposure is not under control is *incorrect*. I hope to update the website tomorrow so the website correctly reflects that human exposure at the TRW Microwave suite **IS** under control.

For more information on EPA's determination that human exposure **is** under control please refer to the EPA 2019 Five-Year Report that addresses the TRW Microwave site. The report is located here: <a href="https://semspub.epa.gov/src/document/09/100018396">https://semspub.epa.gov/src/document/09/100018396</a>. Additional documents on the TRW Microwave site are located here:

https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.docdata&id=0901181.

Thank you, Michael

From: Schulman, Michael

Sent: Wednesday, June 9, 2021 5:29 PM

To: Poalinelli, Edwin < POALINELLI.EDWIN@EPA.GOV >; Margot PerezSullivan (PerezSullivan.Margot@epa.gov)

<PerezSullivan.Margot@epa.gov>

Cc: Ty, Fatima < Ty.Fatima@epa.gov >; Angie Fuoco (Fuoco.Angie@epa.gov) < Fuoco.Angie@epa.gov >

Subject: FW: Health concern for work in TRW superfund

Another inquiry from the TRW Apple Building. The EI I think should be HEUC, but I want to double check the root cause why it is "No" (perhaps inadvertently tied to the OOU, an oversight, something I'm missing... )?

I'm don't want reply back until Ashley first get's a response back, but I'd rather not be radio silent with a reply until next week either.

Michael

From: Hongyan Yi Ex. 6 Personal Privacy (PP)

Sent: Wednesday, June 9, 2021 5:12 PM

**To:** Schulman, Michael < <a href="mailto:Schulman.Michael@epa.gov">Subject: Health concern for work in TRW superfund</a>

Hi Michael,

My office is located right above a superfund. I'm afraid that the office building air affects my health.

## Do all the superfund tests pass for this office building? Is there any potential exposure, if working in this building?

Office address: 825 Stewart Drive, Sunnyvale, California, 94085, United States Superfund info: https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0901181

Based on info from this link, human exposure is still **NOT** under control yet. https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.Healthenv&id=0901181

Performance Measure	Status at this Superfund Site	What does this mean?
Human Exposure Under Control	\$\$c	Yes means assessments indicate that across the entire site:  1. There are currently no unacceptable human exposure pathways; and  2. EPA has determined the site is under control for human exposure.  No means an unsafe level of contamination has been detected at the site and a reasonable expectation exists that people could be exposed.  Insufficient data means that, due to uncertainty regarding exposures, one cannot draw conclusions as to whether human exposures are controlled, typically because:  1. Response to the contamination has not begun; or  2. The response has begun, but it has not yet generated information sufficiently reliable to evaluate whether there are currently any unacceptable human exposure pathways at the site.

Thanks, Hongyan